

Remarks

Applicant respectfully requests reconsideration of the application.

Claims 33, 34 and 40 are rejected under 35 U.S.C. Section 102(b) as being anticipated by Philyaw et al. (U.S. Patent No. 6,098,106).

Claims 35-39 and 41-46 are rejected under 35 U.S.C. Section 103(a) as being unpatentable over Philyaw in view of U.S. Patent No. 6,243,480 (Zhao et al.)

Applicant submits that claims 33, 35-39, and 41-46 have priority at least to the filing date of parent application 08/746,613, filed November 12, 1996 (now issued as U.S. Patent No. 6,122,403) as shown by the following claim support chart at the end of these remarks.

Priority for related claims was established in parent application 10/147,228, when the Office took the position that WO97/43736, which is a PCT counterpart of U.S. Patent No. 6,122,403, anticipated claims in 10/147,228. For background, the Office is directed to the file history of 10/147,228, where related issues of priority were addressed and the application issued at least in part based on the showing of the priority.

As a result of the priority of claims 33, 35-39 to at least November 12, 1996, both Philyaw and Zhao are not prior art.

Regarding claims 34 and 40, the Office has cited Philyaw at col. 13, line 60 to col. 14, line 5 as allegedly teaching the elements of these claims. This passage in Philyaw discloses that an advertisement is triggered during a sports event program. While Philyaw notes that the advertisement may be longer than contracted for and interactive, it provides no teaching regarding a "higher fidelity version" of the audio of the sports event program. Thus, it does not teach the novel combination of claim 34.

Claim 40 recites "substituting the higher fidelity version" in combination with other claim elements. Philyaw's teaching of triggering an advertisement does not teach this aspect of claim 40 in the novel combination as claimed.

Finally, Philyaw is cited as teaching the wireless elements of the claims, such as a portable wireless device, wirelessly transferring the extracted data, and wirelessly receiving data as recited, for example, in claim 33. The citations provided by the Office do not disclose these wireless elements. This issue is, however, moot because Philyaw is not prior art anyway.

The following chart shows examples of support for the claims in priority patent 6,122,403. These citations are not intended to be limiting, and are only examples of support for the claim elements.

| Claim  | Corresponding Support in U.S. Patent 6,122,403  |
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| <p>33. In a portable wireless device that includes a sensor to capture image or audio data, a method comprising:</p> | <p>At col. 64, line 65 to col. 75, line 28 (and shown in Figs. 27, 43 and 53), the specification provides examples of embodiments in which data is decoded from image or audio signals to look up a corresponding URL, which is then used to retrieve corresponding information. These embodiments are expressly applicable to sound signals captured and transmitted by cellular telephones. See, col. 72, line 18, which indicates that the methods of these embodiments applies to sound signals captured by and sent on cellular telephones.</p> <p>Therefore, the teachings regarding cellular telephone embodiments at cols. 87-97 further disclose how to implement the embodiments of Figs. 27, 43 and 53 using cellular telephone systems.</p> <p>Pertinent aspects of these embodiments are illustrated in Figs. 27, 43 and 53. As shown in Figs. 27 and 43, images and audio are captured, downloaded from the Internet, and transferred to a browser 1010 or device with a decoder (e.g., PictureMarc program).</p> <p>Regarding specifics of a portable wireless device and cellular telephone system, please see the cellular telephone 2010 in Fig. 38 (note: this reference numeral appears as "010" in Fig. 38), which includes sensors for audio signals (e.g., microphone 2016) and for RF signals (e.g., antenna 2026 and RF section 2024). Col. 89, lines 38-45.</p> |
| <p>capturing audio in the device to provide an</p>   | <p>The cellular telephone 2010 captures audio from a microphone as well as RF signals</p>   |

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| audio signal;  | <p>conveying audio signals from the cell site 2012.</p> <p>Please also see col. 65, line 25 and col. 66, line 28, which relates the embodiments of Fig. 27 to audio signals. These audio signals are captured from downloading the audio from a network like the Internet.</p>  |
| <p>at least partially extracting a data from the captured audio from the audio signal;</p> | <p>The cellular telephone has a decoder for decoding data from audio signals, such as administrative data, sent from the cell site. One example of administrative data is a seed or seed list.</p> <p>The seed, for example, is encoded as “administrative data” in the transmission to the cellular telephone. The seed is extracted from the audio signal by the cellular telephone and used in its subsequent transmissions. Col. 96, lines 27-43.</p> <p>Fig. 27 shows a signal 1006 that has a URL or index to a URL embedded in it. A browser obtains this signal from a web site (e.g., the signal is transferred to the browser). See col. 64, line 65, to col. 65, line 53. In response to the user clicking on a representation of the signal, the browser decodes a URL or index from the signal. In the case of an index, the method uses the index to obtain a URL address, and returns this URL to the browser.</p> <p>See also col. 65, line 25 and col. 66, line 28, which relates the embodiments of Fig. 27 to audio signals.</p> |
| wirelessly transferring the extracted data to a remote location; and                       | <p>The cellular telephone, in one embodiment, wirelessly sends the extracted data to the cell site 2012.</p> <p>The cell site determines when the telephone has exhausted its seeds by virtue of messages decoded from transmissions from the telephone to the cell site. Col. 95, lines</p>  |

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|   | <p>16-23. The cell site sends steganographically encoded seed lists to the telephone. Col. 96, lines 27-43. These seed lists are stored in the telephone and the secure disk at the cell site. Col. 95, lines 7-9. These seed lists form a database which is indexed to obtain a computer address of key and message data to be used for a transmission. See, for example, col. 94, lines 18-37. Both noise key and messages may be indexed. See, for example, col. 95, lines 6-52. Addresses are returned to the telephone as it uses them to look up keys and messages.</p> <p>In another embodiment, Fig. 27 shows a signal 1006 that has a URL or index to a URL embedded in it. A browser obtains this signal from a web site (e.g., the image is transferred to the browser). See col. 64, line 65, to col. 65, line 53. In response to the user clicking on the image, the browser decodes a URL or index. In the case of an index, the method sends the index to a remote database to obtain a URL address, and returns this URL to the browser.</p> <p>For the sake of further illustration, consider the example of a digital watermarking system called PictureMarc. See Col. 68 line 50 to col. 72, line 9. This system is applicable to a variety of media types, including media transmitted by cellular telephone systems. See col. 72, lines 10-34.</p> <p>The creator ID, thus, serves as an index into the MarcCentre database. The data returned from this database includes URLs, which provide addresses of computers on the Internet. Col. 74, lines 7-34.</p> |
| wirelessly receiving data corresponding to the extracted data from the remote location. | <p>The telephone wirelessly receives data corresponding to the extracted data from the remote cell site 2012.</p> <p>In particular, the cell site 2012 has a</p>   |

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|   | <p>decoder 2038 (Fig. 40). Decoding processes are described at col. 92, line 25, to col. 94, line 3.</p> <p>Corresponding data (e.g., a seed) is returned from the cell site to the portable device. See col. 95, lines 16-24 and col. 96, lines 27-43.</p> <p>The seed, for example, is encoded as “administrative data” in the transmission to the cellular telephone. The seed is decoded by the cellular telephone and used in its subsequent transmissions. Col. 96, lines 27-43.</p> <p>The cellular telephone 2010 has a decoder for decoding encoded data, such as administrative data, sent from the cell site. One example of administrative data is a seed or seed list.</p> <p>In the Fig. 27 and MarcCentre embodiments, the data returned to the cellular telephone includes a web page at the URL and data from the MarcCentre database.</p> |
| 34. The method of claim 33 wherein the data corresponding to the extracted data comprises a higher fidelity version of the audio.           |   |
| 35. The method of claim 33 wherein the extracted data is obtained from a digital watermark steganographically embedded in the audio signal. | <p>The seed, for example, is steganographically encoded as “administrative data” in the transmission to the cellular telephone. The seed is steganographically decoded by the cellular telephone and used in its subsequent transmissions. Col. 96, lines 27-43.</p> <p>In the Fig. 27 and MarcCentre embodiments cited above, the extracted data (e.g., URL or database index) is obtained from a watermark embedded in audio, as well as other signal types.</p>  |
| 36. The method of claim 33 which further  | The cell site determines when the telephone   |

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| <p>includes indexing a database with reference to at least a portion of a digital watermark decoded from the audio signal to obtain information corresponding to the audio signal, and returning the information to the portable wireless device.</p> | <p>has exhausted its seeds by virtue of messages steganographically decoded from transmissions from the telephone to the cell site. Col. 95, lines 16-23. The cell site sends steganographically encoded seed lists to the telephone. Col. 96, lines 27-43. These seed lists are stored in the telephone and the secure disk at the cell site. Col. 95, lines 7-9. These seed lists form a database which is indexed to obtain a computer address of key and message data to be used for a transmission. See, for example, col. 94, lines 18-37. Both noise key and messages may be indexed. See, for example, col. 95, lines 6-52. Addresses are returned to the telephone as it uses them to look up keys and messages.</p> <p>The Fig. 27 and MarcCentre embodiments are expressly applicable to cellular telephone applications (col. 72, line 18, for example). Pertinent aspects of these embodiments are illustrated in Figs. 27, 43 and 53. As shown in Figs. 27 and 43, images and audio are captured, embedded with watermarks, stored on the Internet, and transferred to a browser 1010 or device with a watermark decoder (e.g., PictureMarc program).</p> <p>Fig. 27 shows a signal1006 that has a URL or index to a URL embedded in it. A browser obtains this signal from a web site (e.g., the signal is transferred to the browser). See col. 64, line 65, to col. 65, line 53. In response to the user clicking on a representation of the signal, the browser decodes a URL or index. In the case of an index, the method uses the index to obtain a URL address, and returns this URL to the browser.</p> <p>For the sake of illustration, consider the example of a digital watermarking system called PictureMarc. See Col. 68 line 50 to col. 72, line 9. This system is applicable to</p> |
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|   | <p>a variety of media types, including media transmitted by cellular telephone systems. See col. 72, lines 10-34.</p> <p>Fig. 43 shows an image distributed in print or digitally on the Internet. See, col. 72, lines 35-43. The image is captured and transferred to a remote device such as a computer with the PictureMarc program. Col. 72, lines 44-53. The PictureMarc program decodes a watermark in the image to extract a creator ID. Col. 72, lines 53-59. It sends the creator ID to MarcCentre via the Internet. Col. 72, lines 59-62. MarcCentre uses the creator ID to look up contact information. Col. 72, lines 59-62. See also, col. 73, line 51 to col. 74, line 34.</p> <p>The creator ID, thus, serves as an index into the MarcCentre database. The data returned from this database includes URLs, which provide addresses of computers on the Internet. Col. 74, lines 7-34.</p> |
| <p>37. The method of claim 36 which further includes indexing a database with reference to at least a portion of the decoded watermark to obtain a computer address corresponding thereto, and receiving content data from said computer address at a destination device.</p> | <p>The cell site determines when the telephone has exhausted its seeds by virtue of messages steganographically decoded from transmissions from the telephone to the cell site. Col. 95, lines 16-23. The cell site sends steganographically encoded seed lists to the telephone. Col. 96, lines 27-43. These seed lists are stored in the telephone and the secure disk at the cell site. Col. 95, lines 7-9. These seed lists form a database which is indexed to obtain a computer address of key and message data to be used for a transmission. See, for example, col. 94, lines 18-37. Both noise key and messages may be indexed. See, for example, col. 95, lines 6-52. Addresses are returned to the telephone as it uses them to look up keys and messages.</p> <p>See also the citations above for the Fig. 27 and MarcCentre embodiments.</p>   |

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| <p>38. The method of claim 37 in which the destination device is co-located with the portable device.</p>  | <p>The destination device may be the cellular telephone (the portable device). In this case, the destination device and portable device are co-located.</p> <p>The seed lists are stored in the telephone and the secure disk at the cell site. Col. 95, lines 7-9. These seed lists form a database which is indexed to obtain a computer address of key and message data to be used for a transmission. See, for example, col. 94, lines 18-37. Both noise key and messages may be indexed. See, for example, col. 95, lines 6-52. Addresses are returned to the telephone as it uses them to look up keys and messages.</p> |
| <p>39. The method of claim 38 in which the destination device comprises the portable device.</p>   | <p>The destination device may be the cellular telephone (the portable device). In this case, the destination device and portable device are co-located.</p> <p>The seed lists are stored in the telephone and the secure disk at the cell site. Col. 95, lines 7-9. These seed lists form a database which is indexed to obtain a computer address of key and message data to be used for a transmission. See, for example, col. 94, lines 18-37. Both noise key and messages may be indexed. See, for example, col. 95, lines 6-52. Addresses are returned to the telephone as it uses them to look up keys and messages.</p> |
| <p>40. The method of claim 34 including:<br/> substituting the higher fidelity version for at least a part of the captured data to create a new data object; and<br/> rendering the new data object on an output device.</p> |  |
| <p>41. In a portable wireless device that includes a sensor to capture image or audio</p>  | <p>At col. 64, line 65 to col. 75, line 28 (and shown in Figs. 27, 43 and 53), the specification provides examples of</p>  |



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| <p>data, a method comprising:</p>           | <p>embodiments in which data is decoded from image or audio signals to look up a corresponding URL, which is then used to retrieve corresponding information. These embodiments are expressly applicable to sound signals transmitted by cellular telephones (see, col. 72, line 18, which indicates that the method applies to sound signals sent on cellular telephones).</p> <p>Therefore, the teachings regarding cellular telephone embodiments at cols. 87-97 provides further disclose how to implement the embodiments of Figs. 27, 43 and 53 using cellular telephone systems.</p> <p>Pertinent aspects of these embodiments are illustrated in Figs. 27, 43 and 53. As shown in Figs. 27 and 43, images and audio are captured, downloaded from the Internet, and transferred to a browser 1010 or device with a decoder (e.g., PictureMarc program).</p> <p>Regarding specifics of a portable wireless device and cellular telephone system, please see the cellular telephone 2010 in Fig. 38 (note: this reference numeral appears as "010" in Fig. 38), which includes sensors for audio signals (e.g., microphone 2016) and for RF signals (e.g., antenna 2026 and RF section 2024). Col. 89, lines 38-45.</p> |
| <p>capturing image or audio data;</p>       | <p>The cellular telephone 2010 captures audio from a microphone as well as RF signals conveying audio signals from the cell site 2012.</p> <p>See also col. 65, line 25 and col. 66, line 28, which relates the embodiments of Fig. 27 to audio signals. These audio signals are captured from downloading the audio from a network like the Internet.</p>  |
| <p>decoding steganographically embedded</p> | <p>The cellular telephone has a decoder for decoding data from audio signals, such as</p>   |

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| <p>data from the captured data;</p>                      | <p>administrative data, sent from the cell site. One example of administrative data is a seed or seed list.</p> <p>The seed, for example, is encoded as "administrative data" in the transmission to the cellular telephone. The seed is extracted from the audio signal by the cellular telephone and used in its subsequent transmissions. Col. 96, lines 27-43.</p> <p>Fig. 27 shows a signal 1006 that has a URL or index to a URL embedded in it. A browser obtains this signal from a web site (e.g., the signal is transferred to the browser). See col. 64, line 65, to col. 65, line 53. In response to the user clicking on a representation of the signal, the browser decodes a URL or index from the signal. In the case of an index, the method uses the index to obtain a URL address, and returns this URL to the browser.</p> <p>See also col. 65, line 25 and col. 66, line 28, which relates the embodiments of Fig. 27 to audio signals.</p> |
| <p>transferring the decoded data to a remote device;</p> | <p>The cellular telephone, in one embodiment, wirelessly sends the extracted data to the cell site 2012.</p> <p>The cell site determines when the telephone has exhausted its seeds by virtue of messages decoded from transmissions from the telephone to the cell site. Col. 95, lines 16-23. The cell site sends steganographically encoded seed lists to the telephone. Col. 96, lines 27-43. These seed lists are stored in the telephone and the secure disk at the cell site. Col. 95, lines 7-9. These seed lists form a database which is indexed to obtain a computer address of key and message data to be used for a transmission. See, for example, col. 94, lines 18-37. Both noise key and</p>  |

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|   | <p>messages may be indexed. See, for example, col. 95, lines 6-52. Addresses are returned to the telephone as it uses them to look up keys and messages.</p> <p>In another embodiment, Fig. 27 shows a signal 1006 that has a URL or index to a URL embedded in it. A browser obtains this signal from a web site (e.g., the image is transferred to the browser). See col. 64, line 65, to col. 65, line 53. In response to the user clicking on the image, the browser decodes a URL or index. In the case of an index, the method sends the index to a remote database to obtain a URL address, and returns this URL to the browser.</p> <p>For the sake of further illustration, consider the example of a digital watermarking system called PictureMarc. See Col. 68 line 50 to col. 72, line 9. This system is applicable to a variety of media types, including media transmitted by cellular telephone systems. See col. 72, lines 10-34.</p> <p>The creator ID, thus, serves as an index into the MarcCentre database. The data returned from this database includes URLs, which provide addresses of computers on the Internet. Col. 74, lines 7-34.</p> |
| and<br><br>receiving data from the remote device based on the decoded data. | <p>The telephone wirelessly receives data corresponding to the extracted data from the remote cell site 2012.</p> <p>In particular, the cell site 2012 has a decoder 2038 (Fig. 40). Decoding processes are described at col. 92, line 25, to col. 94, line 3.</p> <p>Corresponding data (e.g., a seed) is returned from the cell site to the portable device. See col. 95, lines 16-24 and col. 96, lines 27-43.</p> <p>The seed, for example, is encoded as</p>   |

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|  | <p>“administrative data” in the transmission to the cellular telephone. The seed is decoded by the cellular telephone and used in its subsequent transmissions. Col. 96, lines 27-43.</p> <p>The cellular telephone 2010 has a decoder for decoding encoded data, such as administrative data, sent from the cell site. One example of administrative data is a seed or seed list.</p> <p>In the Fig. 27 and MarcCentre embodiments, the data returned to the cellular telephone includes a web page at the URL and data from the MarcCentre database.</p> |
| 42. The method of claim 41, wherein the digital audio device comprises a wireless telephone. | <p>These embodiments are expressly applicable to sound signals transmitted by cellular telephones (see, col. 72, line 18, which indicates that the method applies to sound signals sent on cellular telephones).</p> <p>Therefore, the teachings regarding cellular telephone embodiments at cols. 87-97 provides further disclose how to implement the embodiments of Figs. 27, 43 and 53 using cellular telephone systems.</p> <p>cellular telephone 2010</p>  |
| 43. The method of claim 41, wherein said transferring comprises wirelessly transferring.     | <p>The cellular telephone, in one embodiment, wirelessly sends the extracted data to the cell site 2012.</p>   |
| 44. A wireless device comprising:  | <p>Please see the cellular telephone 2010 in Fig. 38 (note: this reference numeral appears as “010” in Fig. 38), which includes sensors for audio signals (e.g., microphone 2016) and for RF signals (e.g., antenna 2026 and RF section 2024). Col. 89, lines 38-45.</p>   |

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| a wireless transmitter and receiver;  | RF transmitter and receiver (e.g., antenna 2026 and RF section 2024). Col. 89, lines 38-45.   |
| a sensor to capture image or audio data;  | sensors for audio signals (e.g., microphone 2016)   |
| a steganographic decoder for discerning auxiliary data steganographically embedded in data received by the device,          | <p>The cellular telephone has a decoder for decoding data from audio signals, such as administrative data, sent from the cell site. One example of administrative data is a seed or seed list.</p> <p>The seed, for example, is encoded as “administrative data” in the transmission to the cellular telephone. The seed is extracted from the audio signal by the cellular telephone and used in its subsequent transmissions. Col. 96, lines 27-43.</p>   |
| said transmitter for sending the auxiliary data to a remote device and receiving corresponding data from the remote device. | <p>The cellular telephone, in one embodiment, wirelessly sends the extracted data to the cell site 2012.</p> <p>The cell site determines when the telephone has exhausted its seeds by virtue of messages decoded from transmissions from the telephone to the cell site. Col. 95, lines 16-23. The cell site sends steganographically encoded seed lists to the telephone. Col. 96, lines 27-43. These seed lists are stored in the telephone and the secure disk at the cell site. Col. 95, lines 7-9. These seed lists form a database which is indexed to obtain a computer address of key and message data to be used for a transmission. See, for example, col. 94, lines 18-37. Both noise key and messages may be indexed. See, for example, col. 95, lines 6-52. Addresses are returned to the telephone as it uses them to look up keys and messages.</p> |
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| 45. (Previously presented) The wireless device of claim 44, wherein said  | the cellular telephone 2010 in Fig. 38 (note: this reference numeral appears as “010” in Fig. 38)   |

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| wireless device comprises a wireless telephone.  |   |
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| 46. (Previously presented) The wireless device of claim 44, wherein said steganographic decoder comprises instructions executing on a processor. | See CPU in Fig. 38 and also Col. 97, lines 19-23. |
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